## What is claimed is:

1. A membrane electrode assembly for an electrolyte fuel cell, the assembly comprising:

a polymer electrolyte membrane,

an anode and a cathode having a catalytic layer and a diffusion layer, and

an alloy catalyst containing ruthenium in the anode diffusion layer.

- 2. The membrane electrode assembly for an electrolyte fuel cell according to claim 1, wherein the alloy catalyst containing Ru is supported on carbon particles, the carbon particles are used mixed with a water repellent resin, and the water repellent resin and the catalyst supporting carbon particles have a weight ratio in a range from 1:9 to 7:3.
- 3. The membrane electrode assembly for an electrolyte fuel cell according to claim 2, wherein the amount of water absorbed by the carbon particles under a saturated water vapor pressure at 60°C is not less than 150 cc/g.